

What is claimed is:

1. A transmission circuit characterized by
2 comprising:
3 first and second amplification means (1, 2)
4 for independently amplifying input signals in different
5 transmission frequency bands, said first amplification
6 means (1) in an ON state producing an unnecessary
7 radiant wave in a frequency band substantially
8 coinciding with a transmission frequency band of said
9 second amplification means (2) in an OFF state;
10 first filter means (4) for extracting a
11 component in the same frequency band as that of an
12 unnecessary radiant wave leaking out from said second
13 amplification means during operation of said first
14 amplification means;
15 phase adjusting means (5) for adjusting a
16 phase of an output signal from said first filter means
17 such that the phase of the output signal from said first
18 filter means becomes opposite to that of an unnecessary
19 radiant wave in an output signal from said first
20 amplification means; and
21 signal combining means (6) for combining an
22 output signal from said phase adjusting means with the
23 output signal from said first amplification means.

2. A circuit according to claim 1, further

3 demultiplexing means for demultiplexing the
4 output signal from said second amplification means to
5 output a first signal to be supplied to said first
6 filter means and a second signal;
7 second filter means for extracting a desired
8 signal from the second signal output from said
9 demultiplexing means; and
10 output means for selectively outputting one of
11 the output signals from said signal combining means and
12 said second filter means.

3. A circuit according to claim 1, wherein
2 said first filter means comprises a bandpass
3 filter, and
4 second filter means comprises a low-pass
5 filter.

4. An unnecessary radiant wave suppression method
2 comprising the steps of:
3 setting transmission frequency bands for a
4 first amplifier and a second amplifier such that a
5 frequency band of an unnecessary radiant wave produced
6 by the first amplifier in an ON state substantially
7 coincides with a transmission frequency band of the
8 second amplifier in an OFF state;
9 extracting a component in the same frequency
10 band as that of an unnecessary radiant wave leaking out

